

What is claimed is:

1. An electronic device comprising:

a circuit board, at least part of which is formed of two or more types of
5 semiconductor chips having different functions, arranged so as not to overlap, and fixed
to each other; and

a plurality of operating elements provided over the circuit board.

2. The electronic device as defined in claim 1, wherein:

10 the two or more types of semiconductor chips include a group of first
semiconductor chips and a group of second semiconductor chips;

each of the first semiconductor chips has a first circuit which drives the
operating elements; and

each of the second semiconductor chips includes a second circuit which
15 controls the first circuits.

3. The electronic device as defined in claim 2, wherein:

the first semiconductor chips are arranged in a plurality of rows and columns;
and

20 one of the second semiconductor chips is disposed in each of the columns.

4. The electronic device as defined in claim 3,

wherein each of the first circuits of the first semiconductor chips is controlled
by the second circuit of the second semiconductor chip arranged in the same column.

25 5. The electronic device as defined in claim 2,

wherein at least one of the first semiconductor chips has a buffer which

amplifies an input signal and outputs the amplified signal.

6. The electronic device as defined in claim 3,

wherein at least one of the first semiconductor chips has a buffer which
5 amplifies an input signal and outputs the amplified signal.

7. The electronic device as defined in claim 4,

wherein at least one of the first semiconductor chips has a buffer which
amplifies an input signal and outputs the amplified signal.

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8. The electronic device as defined in claim 1, further comprising an
interconnecting layer provided between the circuit board and the operating elements.

9. The electronic device as defined in claim 8, wherein:

15 the interconnecting layer includes a plurality of first interconnects which do not
intersect each other and a plurality of second interconnects which do not intersect each
other; and

the first and second interconnects are arranged to intersect each other into a
lattice structure.

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10. The electronic device as defined in claim 9,

wherein one of two voltages having the largest potential difference among
voltages used in the first semiconductor chips is applied to the first and second
interconnects.

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11. The electronic device as defined in claim 1, wherein:

the operating elements includes a first operating element disposed outside of

one of the first semiconductor chips, and a second operating element disposed to overlap one of the first semiconductor chips; and

each of the first semiconductor chips has a first contact section disposed on an edge portion of the first semiconductor chip to be electrically connected to the first operating element, and a second contact section disposed in a center portion of the first semiconductor chip except the edge portion and electrically connected to the second operating element.

12. The electronic device as defined in claim 2, wherein:

the operating elements includes a first operating element disposed outside of one of the first semiconductor chips, and a second operating element disposed to overlap one of the first semiconductor chips; and

each of the first semiconductor chips has a first contact section disposed on an edge portion of the first semiconductor chip to be electrically connected to the first operating element, and a second contact section disposed in a center portion of the first semiconductor chip except the edge portion and electrically connected to the second operating element.

13. The electronic device as defined in claim 3, wherein:

the operating elements includes a first operating element disposed outside of one of the first semiconductor chips, and a second operating element disposed to overlap one of the first semiconductor chips; and

each of the first semiconductor chips has a first contact section disposed on an edge portion of the first semiconductor chip to be electrically connected to the first operating element, and a second contact section disposed in a center portion of the first semiconductor chip except the edge portion and electrically connected to the second operating element.

14. The electronic device as defined in claim 11,
wherein the second operating element is disposed to overlap the second contact
section.

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15. The electronic device as defined in claim 12,
wherein the second operating element is disposed to overlap the second contact
section.

10 16. The electronic device as defined in claim 13,
wherein the second operating element is disposed to overlap the second contact
section.

15 17. The electronic device as defined in claim 1,
wherein each of the operating elements includes one of light-emitting layers
each of which emits one of a plurality of colors.

18. An electronic instrument comprising the electronic device as defined in claim
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19. An electronic instrument comprising the electronic device as defined in claim
17.

20. A method of manufacturing an electronic device comprising:

25 forming at least part of a circuit board by arranging two or more types of
semiconductor chips having different functions so as not to overlap, and fixing the
semiconductor chips to each other by using a resin; and

forming a plurality of operating elements over the circuit board.